

ANTILOADING COMPOSITIONS AND METHODS OF SELECTING SAME

ABSTRACT OF THE DISCLOSURE

An antiload composition includes a first organic compound. The compound has a
5 water contact angle criterion that is less than a water contact angle for zinc stearate. The
first compound also satisfies at least one condition selected from the group consisting of a
melting point T_{melt} greater than about 40 °C, a coefficient of friction F less than about 0.3,
and an antiload criterion P greater than about 0.3. Another embodiment includes a
second organic compound, having a different water contact angle from that of the first
10 organic compound. The composition has a particular water contact angle W_p° that is
determined, at least in part, by the independent W_g° of each compound and the proportion
of each compound in the composition.

Also, an abrasive product includes the antiload composition. A method of grinding
a substrate is disclosed that includes employing effective amount of an antiload
15 composition. Further disclosed is a method of selecting an antiload compound.